

10/029065

280

Attorney Docket No. 5839-2 (42960/196219)

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Number : 6,906,243 B2

Issued : June 14, 2005

Name of Patentee : Pioneer Hi-Bred International, Inc.

Title of Invention : Plant MSH2 Sequences and Methods of Use

Certificate of Corrections Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

*Certificate
AUG 12 2005
of Correction*

**REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT
FOR PTO MISTAKE (37 CFR 1.322(a))**

1. Attached, in duplicate, is Form PTO/SB/44, with at least one copy being suitable for printing.
2. The exact page and line number where the errors are shown correctly in the application file are:

Claim 2 (renumbered as claim 1) was amended and is accurately described on pages 2, 3 and 4 of the Examiner's Amendment provided with the Notice of Allowance issued December 13, 2004.

In the issued patent, Column 76, line 66, part (d), "corresponding to" should be replaced with "of".

In the issued patent, Column 77, lines 8-10, part (e), "[, and wherein percent sequence identify is obtained using GAP version 10 with a GAP Weight of 50 and a Length Weight of 3]" should be deleted.

In the issued patent, Column 77, line 12, part (f), the word "identify" should be replaced with "identity".

In the issued patent, Column 77, line 16, part (f), the word "activity" should be inserted after "mismatch-repair".

AUG 12 2005

Patent No. 6,906,243 B2
Attorney Docket No. 5839-2 (42960/196219)

Claim 26 (renumbered as claim 19) was amended and is accurately described on page 4 and 5 of the Examiner's Amendment provided with the Notice of Allowance issued December 13, 2004.

In the issued patent, Column 78, line 8, part (d), "corresponding to" should be replaced with "of".

In the issued patent, Column 78, line 15, part (e), "identify" should be replaced with "identity".

In the issued patent, Column 78, line 20, part (f), "identify" should be replaced with "identity".

Claim 41 (renumbered as claim 30) was amended and is accurately described on page 6 of the Examiner's Amendment provided with the Notice of Allowance issued December 13, 2004.

In the issued patent, Column 78, line 57, "identify" should be replaced with "identity".

A copy of the Notice of Allowance is attached for the convenience of the office.

3. Please send the Certificate to:

Name Virginia Dress
Address: Pioneer Hi-Bred International, Inc.
 Corporate Intellectual Property
 7250 N.W. 62nd Avenue
 P.O. Box 552
 Johnston, Iowa 50131-0552

Respectfully submitted,

Virginia Dress
Virginia Dress
Agent for Applicant(s)
Registration No. 48,243

PIONEER HI-BRED INTERNATIONAL, INC.
Corporate Intellectual Property
7250 N.W. 62nd Avenue
P.O. Box 552
Johnston, Iowa 50131-0552
Phone: (515) 270-4192
Facsimile: (515) 334-6883



UNITED STATES PATENT AND TRADEMARK OFFICE

O P E

AUG 08 2005
JC103

00826

7590

12/13/2004

11/11/05

DEC 16 2004

Received By

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

ALSTON & BIRD LLP
BANK OF AMERICA PLAZA
101 SOUTH TRYON STREET, SUITE 4000
CHARLOTTE, NC 28280-4000

EXAMINER

KRUSE, DAVID H

ART UNIT

PAPER NUMBER

1638

DATE MAILED: 12/13/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,065	12/20/2001	Peter B. Kipp	5839-2 (42960/196219)	5324

TITLE OF INVENTION: PLANT MSH2 SEQUENCES AND METHODS OF USE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	03/14/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

ALSTON & BIRD

RTA

RECEIVED

12/17/04 WW

12/17/04 bky

DOCKETED

By

Date

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

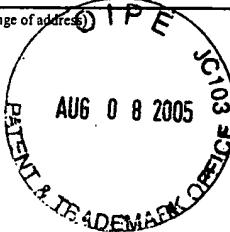
Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

00826 7590 12/13/2004

ALSTON & BIRD LLP
BANK OF AMERICA PLAZA
101 SOUTH TRYON STREET, SUITE 4000
CHARLOTTE, NC 28280-4000



Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,065	12/20/2001	Peter B. Kipp	5839-2 (42960/196219)	5324

TITLE OF INVENTION: PLANT MSH2 SEQUENCES AND METHODS OF USE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	03/14/2005

EXAMINER	ART UNIT	CLASS-SUBCLASS
KRUSE, DAVID H	1638	800-278000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

Change of correspondence address (or Change of Correspondence Address form PTO/SB/12) attached.
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are enclosed:

Issue Fee
 Publication Fee (No small entity discount permitted)
 Advance Order - # of Copies _____

4b. Payment of Fee(s):

A check in the amount of the fee(s) is enclosed.
 Payment by credit card. Form PTO-2038 is attached.
 The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
 b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

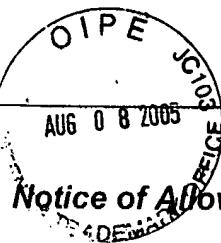
Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



Notice of Allowability

Notice of Allowability <small>DEMAILED</small>	Application No.	Applicant(s)
	10/029,065	KIPP ET AL.
	Examiner David H Kruse	Art Unit 1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to the Amendment filed 22 September 2004.
2. The allowed claim(s) is/are 2,4-6,9-16,19-23,25-33,35-37,41 and 43.
3. The drawings filed on 20 December 2001 are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date SAME.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,065	12/20/2001	Peter B. Kipp	5839-2 (42960/196219)	5324
00826	7590	12/13/2004		

ALSTON & BIRD LLP
BANK OF AMERICA PLAZA
101 SOUTH TRYON STREET, SUITE 4000
CHARLOTTE, NC 28280-4000

EXAMINER

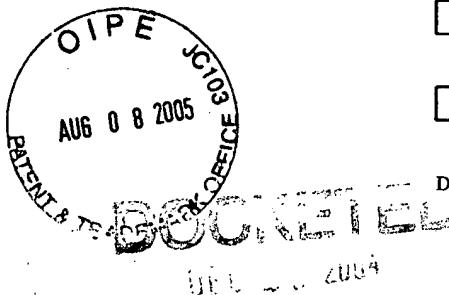
KRUSE, DAVID H

ART UNIT

PAPER NUMBER

1638

DATE MAILED: 12/13/2004



Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 374 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 374 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David M. Saravitz on 7 December 2004.

The application has been amended as follows:

Claim 2. (Amended) An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

- (a) the nucleotide sequence set forth in SEQ ID NO: 1 or 3;
- (b) a nucleotide sequence encoding the amino acid sequence set forth in SEQ ID NO: 2 or 4;
- (c) a nucleotide sequence encoding residues 1-265 of the amino acid sequence set forth in SEQ ID NO: 2 or 4;
- (d) an antisense nucleotide sequence [corresponding to] of the nucleotide sequence of (a), (b) or (c);
- [(e) a nucleotide sequence comprising at least 85% sequence identity to at least one nucleotide sequence selected from the group consisting of SEQ ID NOS:1 and 3, wherein said nucleotide sequence encodes a protein comprising mismatch-repair activity and percent sequence identity is obtained using GAP version 10 with a GAP Weight of 50 and a Length Weight of 3;

(f) a nucleotide sequence comprising at least 50 contiguous nucleotides of at least one nucleotide sequence selected from the group consisting of SEQ ID NOS:1 and 3, wherein said nucleotide sequence encodes a protein comprising mismatch-repair activity;

(g) a nucleotide sequence that hybridizes under stringent conditions to the complement of at least one nucleotide sequence selected from the group consisting of SEQ ID NOS:1 and 3, wherein said nucleotide sequence encodes a protein comprising mismatch-repair activity and said stringent conditions comprise hybridization in a solution comprising 50% formamide, 1 M NaCl, and 1% SDS at 37°C and a wash in a solution comprising 0.1X SSC at 60°C;]

(e) [(h)] a nucleotide sequence encoding a fragment or variant of the amino acid sequence set [for] forth in SEQ ID NO: 2 or 4, wherein said fragment or said variant confers a dominant-negative phenotype in a host cell and said variant has at least [85%] 95% sequence identity to at least one amino acid sequence selected from the group consisting of the amino acid sequences set forth in SEQ ID NOS: 2 and 4[, and wherein percent sequence identity is obtained using GAP version 10 with a GAP Weight of 50 and a Length Weight of 3];

(f) [(i)] a nucleotide sequence encoding an amino acid sequence having at least [85%] 95% sequence identity to at least one amino acid sequence selected from the group consisting of the amino acid sequences set forth in SEQ.ID NOS: 2 and 4, wherein said nucleotide sequence encodes a protein comprising mismatch-repair

activity[and percent sequence identity is obtained using GAP version 10 with a GAP Weight of 50 and a Length Weight of 3]; and

(g) [(i)] nucleotides 1-797 of SEQ ID NO: 1.

Claim 26 (Amended) A method for altering DNA repair processes in a plant comprising introducing into a plant a nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

- (a) the nucleotide sequence set forth in SEQ ID NO: 1 or 3;
- (b) a nucleotide sequence encoding the amino acid sequence set forth in SEQ ID NO: 2 or 4;
- (c) a nucleotide sequence encoding residues 1-265 of the amino acid sequence set forth in SEQ ID NO: 2 or 4;
- (d) an antisense nucleotide sequence [corresponding to] of the nucleotide sequence of (a), (b) or (c);
- [(e) a nucleotide sequence comprising at least 85% sequence identity to at least one nucleotide sequence selected from the group consisting of SEQ ID NOS:1 and 3, wherein said nucleotide sequence encodes a protein comprising mismatch-repair activity and percent sequence identity is obtained using GAP version 10 with a GAP Weight of 50 and a Length Weight of 3;
- (f) a nucleotide sequence comprising at least 50 contiguous nucleotides of at least one nucleotide sequence selected from the group consisting of SEQ ID NOS:1 and 3, wherein said nucleotide sequence encodes a protein comprising mismatch-repair activity;

(g) a nucleotide sequence that hybridizes under stringent conditions to the complement of at least one nucleotide sequence selected from the group consisting of SEQ ID NOS:1 and 3, wherein said nucleotide sequence encodes a protein comprising mismatch-repair activity and said stringent conditions comprise hybridization in a solution comprising 50% formamide, 1 M NaCl, and 1% SDS at 37°C and a wash in a solution comprising 0.1X SSC at 60°C;]

(e)[(h)] a nucleotide sequence encoding a fragment or variant of the amino acid sequence set [for] forth in SEQ ID NO: 2 or 4, wherein said fragment or said variant confers a dominant-negative phenotype in a host cell and said variant has at least [85%] 95% sequence identity to at least one amino acid sequence selected from the group consisting of the amino acid sequences set forth in SEQ ID NOS: 2 and 4[, and wherein percent sequence identity is obtained using GAP version 10 with a GAP Weight of 50 and a Length Weight of 3];

(f)[(i)] a nucleotide sequence encoding an amino acid sequence having at least [85%] 95% sequence identity to at least one amino acid sequence selected from the group consisting of the amino acid sequences set forth in SEQ ID NOS: 2 and 4, wherein said nucleotide sequence encodes a protein comprising mismatch-repair activity[and percent sequence identity is obtained using GAP version 10 with a GAP Weight of 50 and a Length Weight of 3]; and

(g)[(i)] nucleotides 1-797 of SEQ ID NO: 1.

Claims 38-40 and 42 have been cancelled.

Claim 41 (Amended) An isolated nucleic acid molecule comprising a nucleotide sequence encoding an amino acid sequence having at least [90%] 95% sequence identity to at least one amino acid sequence selected from the group consisting of the amino acid sequences set forth in SEQ ID NOS: 2 and 4, wherein said nucleotide sequence encodes a protein comprising mismatch-repair activity [and percent sequence identity is obtained using GAP version 10 with a GAP Weight of 50 and a Length Weight of 3].

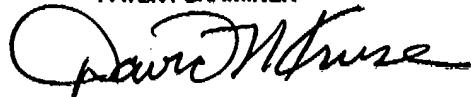
2. On 2 December 2004, the Examiner proposed amendments to claims 2, 26 and 41 that would put the application in condition for allowance. Applicant's attorney on 7 December 2004, conveyed that Applicant approved the Examiner's proposed amendments.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (571) 272-0799. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Amy Nelson can be reached at (571) 272-0804. The fax telephone number for this Group is (703) 872-9306 Before Final or (703) 872-9307 After Final.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-0547.

DAVID H. KRUSE, PH.D.
PATENT EXAMINER

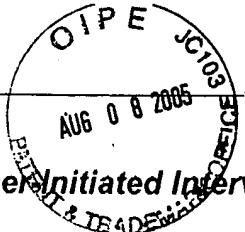


David H. Kruse, Ph.D.
7 December 2004

4. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.



Examiner Initiated Interview Summary

	Application No.	Applicant(s)
	10/029,065	KIPP ET AL.
	Examiner David H Kruse	Art Unit 1638

All Participants:

(1) David H Kruse

Status of Application: Allowance

(3) _____

(2) David M. Saravitz

(4) _____

Date of Interview: 2 December 2004

Time: PM

Type of Interview:

Telephonic
 Video Conference
 Personal (Copy given to: Applicant Applicant's representative)

Exhibit Shown or Demonstrated: Yes No

If Yes, provide a brief description:

Part I.

Rejection(s) discussed:

NONE

DOCUMENTED

12/08/2004

Claims discussed:

2, 26, 38-40 and 42

Prior art documents discussed:

NONE

Part II.

SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:

Part III.

It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.
 It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.

(Examiner/SPE Signature)

(Applicant/Applicant's Representative Signature – if appropriate)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO : 6,906,243 B2

Page 1 of 2

APPLICATION NO.: 10/029,065

ISSUE DATE : June 14, 2005

INVENTOR(S) : Peter B. Kipp et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 75

Lines 66-67, should read as follows:

– (d) an antisense nucleotide sequence of the nucleotide sequence of (a), (b) or (c); –

Column 77

Lines 1-16, should read as follows:

– (e) a nucleotide sequence encoding a fragment or variant of the amino acid sequence set forth in SEQ ID NO: 2 or 4, wherein said fragment or said variant confers a dominant-negative phenotype in a host cell and said variant has at least 95% sequence identity to at least one amino acid sequence selected from the group consisting of the amino acid sequences set forth in SEQ ID NO: 2 and 4; –

Column 77

Lines 11-16, should read as follows:

– (f) a nucleotide sequence encoding an amino acid sequence having at least 95% sequence identity to at least one amino acid sequence selected from the group consisting of the amino acid sequences set forth in SEQ ID NOS: 2 and 4, wherein said nucleotide sequence encodes a protein comprising mismatch-repair activity; and –

MAILING ADDRESS OF SENDER (Please do not use customer number below):

Pioneer Hi-Bred International, Inc
 7250 N.W. 62nd Avenue
 P.O. Box 552
 Johnston, Iowa 50131-0552

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

AUG 12 2005

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO : 6,906,243 B2

Page 2 of 2

APPLICATION NO.: 10/029,065

ISSUE DATE : June 14, 2005

INVENTOR(S) : Peter B. Kipp et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 78

Lines 8-9, should read as follows:

– (d) an antisense nucleotide sequence of the nucleotide sequence of (a), (b) or (c); –

Column 78

Lines 11-18, should read as follows:

– (e) a nucleotide sequence encoding a fragment or variant of the amino acid sequence set forth in SEQ ID NO: 2 or 4, wherein said fragment or said variant confers a dominant-negative phenotype in a host cell and said variant has at least 95% sequence identity to at least one amino acid sequence selected from the group consisting of the amino acid sequences set forth in SEQ ID NO: 2 and 4; –

Column 78

Lines 19-25, should read as follows:

– (f) a nucleotide sequence encoding an amino acid sequence having at least 95% sequence identity to at least one amino acid sequence selected from the group consisting of the amino acid sequences set forth in SEQ ID NOS: 2 and 4, wherein said nucleotide sequence encodes a protein comprising mismatch-repair activity; and –

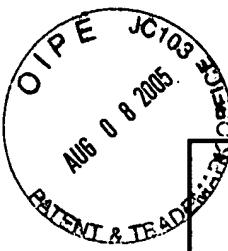
MAILING ADDRESS OF SENDER (Please do not use customer number below):

Pioneer Hi-Bred International, Inc
 7250 N.W. 62nd Avenue
 P.O. Box 552
 Johnston, Iowa 50131-0552

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

AUG 12 2005



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Certificate of Mailing under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on August 3, 2005

Date

Signature

Virginia Dress

Typed or printed name of person signing Certificate

48,243

(515) 270-4192

Registration Number, if applicable

Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

- 1) Request for Certificate of Correction of Patent / 2 Pages (1 copy)
- 2) Copy of Notice of Allowance / 11 Pages (1 copy)
- 3) Certificate of Correction / 2 Pages (2 copies)

This collection of information is required by 37 CFR 1.8. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1.8 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

AUG 12 2005